JPI Lessons Learned Process

Processing Pre-LLC

LLC Action

Post-LLC Processing

Lesson Sources

Rumor mill (main source) LLC members (line org) JPL Engineering Board Anomaly reporting system Weekly project status rpts Project milestone reviews Mishap investigation boards Other

LLC Membership (reps from)

- Mechanical Systems
- Systems Engineering/SW
- Autonomous Systems
- Information Technology
- Acquisition
- Institutional Mgmt Systems
- Reliability Engineering
- Quality Assurance
- System Safety
- Occupational Safety

Each member:

- 1. Solicits LL candidates from within home org.
- 2. Represents tech discipline in reviewing LL draft.
- 3. Infuses LLC products within home org.

Submission of the LL to JPL **Document Review Services** to obtain clearance for public release

Submission of the LL to the NASA Lesson Learned Information System (LLIS)

Lessons Learned Committee Chair (aka JPL CKO)

- · Chair maintains lesson learned candidate list
- LLC validates each lesson learned candidate
- LLC ranks each candidate ("1" to "9"), based on potential value to subsequent projects
- Chair selects highest ranking candidate and assigns LLC's dedicated writer to draft LL
- Chair verifies the LL facts/recommendations

Weekly LLC Meeting

- · Revalidation of the LL candidate based on initial review of actual draft LL
- · Real time "wordsmithing" of the draft LL by the committee
- LLC approval of the LL

Infusion

Infusion of each LL into two key JPL requirements docs (so we are not dependent on the right person reading the LL at the appropriate project milestone)

> JPL Design **Principles**

JPL Flight **Project Practices**

Institutional practices

OCKO integrates LL activity with other elements of KM strategy:

- · Case studies
- · Pause and Learn
- Knowledge-sharing workshops
- Support to HQ KM program
- Other

Success Factors:

- Institutional commitment to being a learning organization
- Well-written LLs are not cheap to produce!
- Your incident POC may not be eager to draft a LL, but he will always be willing to review it.
- Include "positive" LL candidates—not just mishaps
- Careful vetting of the facts is crucial to LL credibility.
- Recommendations must be readily "actionable"—not just "motherhood" statements
- Our LL process appears to benefit from a JPL culture of intellectual openness

LLC Finding-- topic warrants:

- 1. a Lesson learned
- 2. an Institutional Corrective Action Notice (CAN), or
- 3. a NASA Alert

Legend

KM: knowledge management

LL: lesson learned

LLC: JPL Lessons Learned Committee

OCKO: Office of the Chief Knowledge Officer (CKO)